WHAT IS CLAIMED IS:

1. A mobile terminal which transmits, over an air interface to a power status repository of a wireless local area network (LAN), power status information, the power status information having an indication of whether the mobile terminal is currently operating using battery power or line power.

2. The mobile terminal of claim 1, wherein the power status information is transmitted at one of the following times: (1) upon power-up of the mobile terminal; (2) upon command issued from the power status repository; (3) upon establishment of a connection between the mobile terminal and the LAN; and (4) upon a change in power status for the mobile terminal.

3. The mobile terminal of claim 1, wherein the power status information is transmitted as a dedicated message.

4. The mobile terminal of claim 1, wherein the power status information is included in a message with other status information.

5. The mobile terminal of claim 1, wherein the power status repository is an access point of the wireless local area network.

6. The mobile terminal of claim 1, wherein the wireless local area network is an ad hoc network and wherein the power status repository is another mobile terminal participating in the network.

7. A wireless local area network (LAN) comprising a mobile terminal which communicates over an air interface with a power status repository; wherein

the mobile terminal transmits power status information over the air interface to the power status repository, the power status information having an indication of whether the mobile terminal is currently operating using battery power or line power;

the power status repository uses the power status information to determine when to transmit a frequency measurement command to the mobile terminal to request the mobile terminal to make measurements regarding a radio frequency.

8. The network of claim 7, wherein the power status repository transmits a frequency measurement command more often to the mobile terminal when the mobile terminal (MT) is using line power than when the mobile terminal is using battery power.

9. The network of claim 7, wherein the power status information is transmitted at one of the following times: (1) upon power-up of the mobile terminal; (2) upon command issued from the power status repository; (3) upon establishment of a connection between the mobile terminal and the LAN; and (4) upon a change in power status for the mobile terminal.

10. The network of claim 7, wherein the power status information is transmitted as a dedicated message.

11. The network of claim 7, wherein the power status information is included in a message with other status information.

12. The network of claim 7, wherein the power status repository is an access point of the wireless local area network.

13. The network of claim 7, wherein the wireless local area network is an ad hoc network and wherein the power status repository is another mobile terminal participating in the network.

14. A method of operating a wireless local area network (LAN) comprising a mobile terminal which communicates over an air interface with a power status repository; the method comprising:

the mobile terminal transmitting power status information over the air interface to the power status repository, the power status information having an indication of whether the mobile terminal is currently operating using battery power or line power;

the power status repository using the power status information to determine when to transmit a frequency measurement command to the mobile terminal to request the mobile terminal to make measurements regarding a radio frequency.

15. The method of claim 14, further comprising the power status repository transmitting a frequency measurement command more often to the mobile terminal when the mobile terminal is using line power than when the mobile terminal is using battery power.

16. The method of claim 14, further comprising transmitting the power status information at one of the following times: (1) upon power-up of the mobile terminal; (2) upon command issued from the power status repository; (3) upon establishment of a connection between the mobile terminal and the LAN; and (4) upon a change in power status for the mobile terminal.

17. The method of claim 14, further comprising transmitting the power status information as a dedicated message.

18. The method of claim 14, further comprising transmitting the power status information in a message with other status information.

19. The method of claim 14, further comprising using an access point of the wireless local area network as the power status repository.

20. The method of claim 7, wherein the wireless local area network is an ad hoc network, and wherein the method further comprises using another mobile terminal participating in the network as the power status repository.

21. A mobile terminal which transmits, over an air interface to a power status repository of a wireless local area network (LAN), measurement capability information, the measurement capability information having an indication of whether the mobile terminal has a capacity to perform radio frequency measurements.

22. The mobile terminal of claim 21, wherein the measurement capability information indicates one of low power of the mobile terminal or a power restriction on the mobile terminal.

23. The mobile terminal of claim 21, wherein the measurement capability information indicates a sleep mode of the mobile terminal.

24. The mobile terminal of claim 21, wherein the measurement capability information is transmitted as a dedicated message.

25. The mobile terminal of claim 21, wherein the measurement capability information is included in a message with other status information.

26. The mobile terminal of claim 21, wherein the power status repository is an access point of the wireless local area network.

27. The mobile terminal of claim 21, wherein the wireless local area network is an ad hoc network and wherein the power status repository is another mobile terminal participating in the network.

28. A wireless local area network (LAN) comprising a mobile terminal which communicates over an air interface with a power status repository, wherein the mobile terminal transmits measurement capability information over the air interface to the power status repository, the measurement capability information having an indication of whether the mobile terminal has a power capacity to perform radio frequency measurements.

29. The network of claim 28, wherein if the power status repository does not have sufficient measurements regarding radio frequency, the power status repository modifies a rate at which a frequency measurement command is transmitted to another mobile terminal.

30. The network of claim 28, wherein the power status repository increases a rate at which a frequency measurement command is transmitted to another mobile terminal.

31. The network of claim 28, wherein the measurement capability information indicates one of low power of the mobile terminal or a power restriction on the mobile terminal.

32. The network of claim 28, wherein the measurement capability information indicates a sleep mode of the mobile terminal.

33. The network of claim 28, wherein the measurement capability information is transmitted as a dedicated message.

34. The network of claim 28, wherein the measurement capability information is included in a message with other status information.

35. The network of claim 28, wherein the power status repository is an access point of the wireless local area network.

36. The network of claim 28, wherein the wireless local area network is an ad hoc network and wherein the power status repository is another mobile terminal participating in the network.

37. A method of operating a wireless local area network (LAN) comprising a mobile terminal which communicates over an air interface with a power status repository; the method comprising:

the mobile terminal transmitting measurement capability information over the air interface to the power status repository, the measurement capability information having an indication of whether the mobile terminal has a power capacity to perform radio frequency measurements;

the power status repository using the measurement capability information to determine whether to transmit a frequency measurement command to the mobile terminal to request the mobile terminal to make measurements regarding a radio frequency.

38. The method of claim 37, wherein if the power status repository does not have sufficient measurements regarding radio frequency, the power status repository modifies a rate at which a frequency measurement command is transmitted to another mobile terminal.

39. The method of claim 38, wherein the power status repository increases a rate at which a frequency measurement command is transmitted to another mobile terminal.

40. The method of claim 37, further comprising transmitting the measurement capacity information as a dedicated message.

41. The method of claim 37, further comprising including in the measurement capability information an indication of one of low power of the mobile terminal and a power restriction on the mobile terminal.

42. The network of claim 37, further comprising including in the measurement capability information an indication of a sleep mode of the mobile terminal.

43. The method of claim 37, further comprising transmitting the measurement capacity information in a message with other status information.

44. The method of claim 37, further comprising using an access point of the wireless local area network as the power status repository.

45. The method of claim 37, wherein the wireless local area network is an ad hoc network, and wherein the method further comprises using another mobile terminal participating in the network as the power status repository.

46. A mobile terminal which transmits information over an air interface to power status repository of a wireless local area network (LAN), and wherein the mobile terminal determines a duration of a sleep cycle in accordance with power status information of the mobile terminal, the power status information having an indication of whether the mobile terminal is currently operating using battery power or line power.

47. The mobile terminal of claim 46, wherein the power status repository is an access point of the wireless local area network.

48. The mobile terminal of claim 46, wherein the wireless local area network is an ad hoc network and wherein the power status repository is another mobile terminal participating in the network.

49. A wireless local area network (LAN) comprising:

a power status repository;

plural mobile terminals which communicate over an air interface with the power status repository;

wherein if the power status repository does not have sufficient measurements from the plural mobile terminals in view of incapacity of one or more of the plural mobile terminals to perform a frequency measurement regarding radio frequency, the power status repository modifies a rate at which a frequency measurement command is transmitted to any of the mobile terminals which have sufficient capacity to perform the frequency measurement.

50. The network of claim 49, wherein the power status repository increases a rate at which a frequency measurement command is transmitted to the mobile terminals which have sufficient capacity to perform the frequency measurement.

51. The network of claim 49, wherein the power status repository is an access point of the wireless local area network.

52. The network of claim 49, wherein the wireless local area network is an ad hoc network and wherein the power status repository is another mobile terminal participating in the network.

53. A method of operating a wireless local area network (LAN) having plural mobile terminals which communicate over an air interface with a power status repository, the method comprising:

making a determination whether the power status repository has sufficient measurements from the plural mobile terminals in view of incapacity of one or more of the plural mobile terminals to perform a frequency measurement regarding radio frequency; and if the determination is negative;

modifying a rate at which a frequency measurement command is transmitted from the power status repository to any of the mobile terminals which have sufficient capacity to perform the frequency measurement.

54. The method of claim 53, further comprising the power status repository increasing a rate at which a frequency measurement command is transmitted to the mobile terminals which have sufficient capacity to perform the frequency measurement if the determination is negative.

55. The method of claim 53, further comprising using an access point of the wireless local area network as the power status repository.

56. The method of claim 53, wherein the wireless local area network is an ad hoc network, and wherein the method further comprises using another mobile terminal participating in the network as the power status repository.